INTERNATIONAL SEARCH REPORT

Int ... nal Application No
PCT/IL 01/00697

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04Q7/36

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	LI-CHUN WANG ET AL: "ARCHITECTURE DESIGN, FREQUENCY PLANNING, AND PERFORMANCE ANALYSIS FOR A MICROCELL/MACROCELL OVERLAVING SYSTEM" 1996 IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS (ICC). CONVERGING TECHNOLOGIES FOR TOMORROW'S APPLICATIONS. DALLAS, JUNE 23 - 27, 1996, IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS (ICC), NEW YORK, IEEE, US, vol. 2, 23 June 1996 (1996-06-23), pages 797-801, XP000625884 ISBN: 0-7803-3251-2 page 797, left-hand column, line 1 -right-hand column, line 21 --- -/--	1-11

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

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Date of the actual completion of the international search	Date of mailing of the international search report
28 March 2002	11/04/2002

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Chêne, X

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
Y	CIMINI L J ET AL: "DISTRIBUTED DYNAMIC CHANNEL ALLOCATION ALGORITHMS FOR MICROCELLULAR SYSTEMS" WIRELESS COMMUNICATIONS. FUTURE DIRECTIONS, DORDRECHT, NL, 1993, pages 219-241, XP000431206 page 219 -page 221 ---	1-11
Y	FRULLONE M ET AL: "ON THE OPTIMUM ALLOTMENT OF FREQUENCY RESOURCES IN MIXED CELLULAR LAYOUTS" IEICE TRANSACTIONS ON FUNDAMENTALS OF ELECTRONICS, COMMUNICATIONS AND COMPUTER SCIENCES, INSTITUTE OF ELECTRONICS INFORMATION AND COMM. ENG. TOKYO, JP, vol. E75-A, no. 12, 1 December 1992 (1992-12-01), pages 1642-1651, XP000339150 ISSN: 0916-8508 page 1643, left-hand column, line 19, paragraph 2.1 -right-hand column, line 18 ---	1-11
Y	GREENSTEIN L J: "MICROCELLS IN PERSONAL COMMUNICATIONS SYSTEMS" IEEE COMMUNICATIONS MAGAZINE, IEEE SERVICE CENTER. PISCATAWAY, N.J, US, vol. 30, no. 12, 1 December 1992 (1992-12-01), pages 76-88, XP000330092 ISSN: 0163-6804	12-15
X	page 85, left-hand column, line 10 -right-hand column, line 10; figure 14 ---	21-23
Y	EP 0 817 516 A (NIPPON ELECTRIC CO) 7 January 1998 (1998-01-07) abstract; figure 1 column 1, line 24 - line 29 ---	12-15
X	US 5 483 666 A (OHMORI EIJI ET AL) 9 January 1996 (1996-01-09) abstract -----	16-20

INTERNATIONAL SEARCH REPORT

In onal Application No
PCT/IL 01/00697

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0817516 A	07-01-1998	JP 2809273 B2	08-10-1998
		JP 10013909 A	16-01-1998
		EP 0817516 A2	07-01-1998
		US 6035208 A	07-03-2000
US 5483666 A	09-01-1996	JP 2643689 B2	20-08-1997
		JP 5110501 A	30-04-1993
		GB 2260879 A ,B	28-04-1993
		US 5710973 A	20-01-1998

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
13 February 2003 (13.02.2003)

PCT

(10) International Publication Number
WO 03/013168 A1

(51) International Patent Classification[7]: H04Q 7/36

(21) International Application Number: PCT/IL01/00697

(22) International Filing Date: 29 July 2001 (29.07.2001)

(25) Filing Language: English

(26) Publication Language: English

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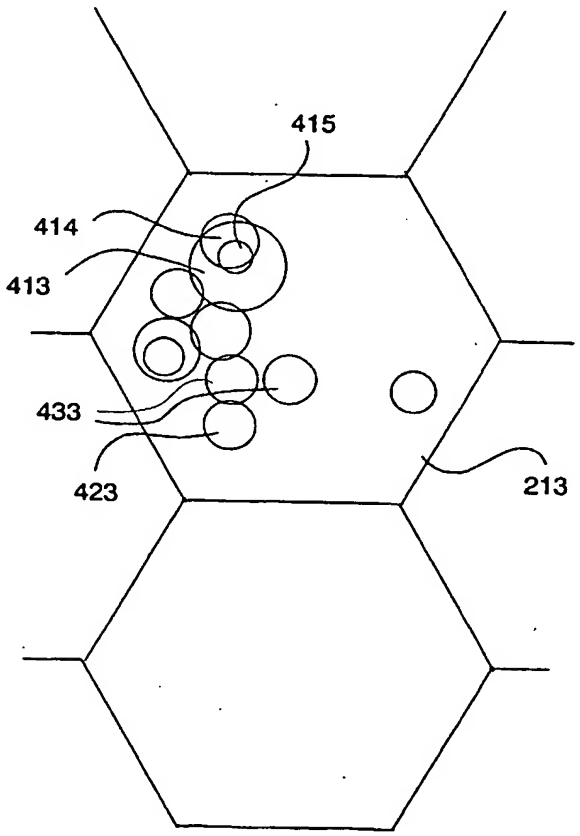
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CELLULAR NETWORK SYSTEM AND METHOD



(57) Abstract: A method for gradual expansion of a cellular network comprising the steps of: A. Creating a plurality of new, smaller cells within an existing, larger cell, wherein each new cell is randomly located; B. integrating each of the new cells within the existing cellular network by connecting it to the cellular network infrastructure; and C. giving priority in connecting mobile users through one of the new cells'base stations, by transferring calls from the existing base station to a new base station, whenever possible. In a cellular network system, an add-on base station comprising transmitters, receivers and a controller, wherein the controller includes means for listening to the cellular traffic and for allowing the base station to take control according to predefined rules.

WO 03/013168 A1